Headquarters U.S. Air Force

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Air Force Blood Program Update

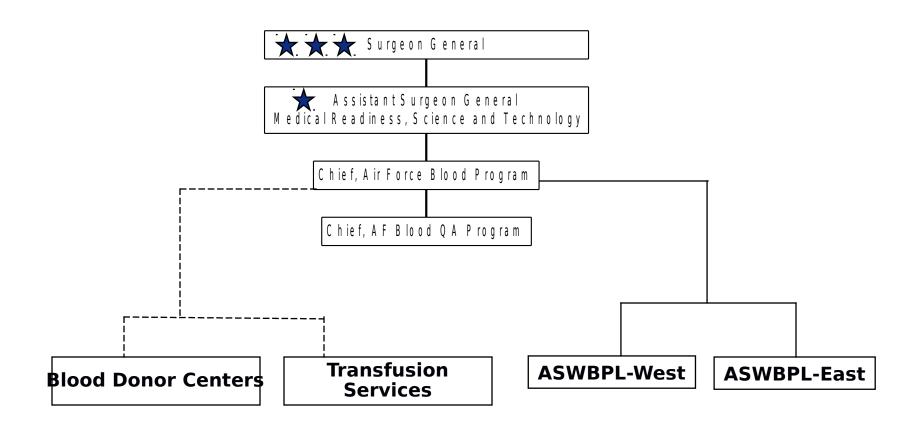
Chief, Air Force Blood Program



U.S. AIR FORCE

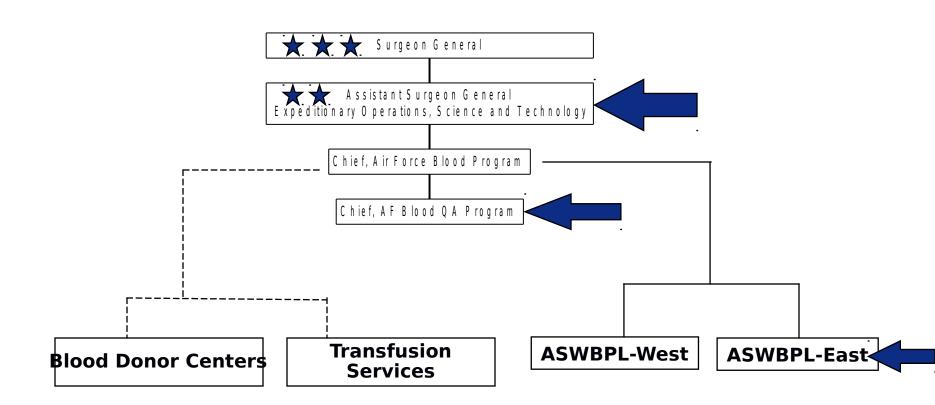


Organization Structure





Organization Structure





- Essential Readiness Mission
 - Wartime Requirements 550 units/day
 - Peacetime ASWBPL Contingency Requirement 288 units/month
- AF Missions
 - Blood Donor Centers 8 licensed, 3 satellite collection sites
 - Armed Services Whole Blood Processing Laboratories
 - Blood Transshipment Centers/TBTCs
 - Frozen Blood in PACAF
- FDA Considers Blood a "Manufacturing" Industry
 - Biologics License 610 USAF is an Establishment
 - Must Comply with CFR and Good Manufacturing Practices
 - Bi-Annual Quality Audits of Donor Centers

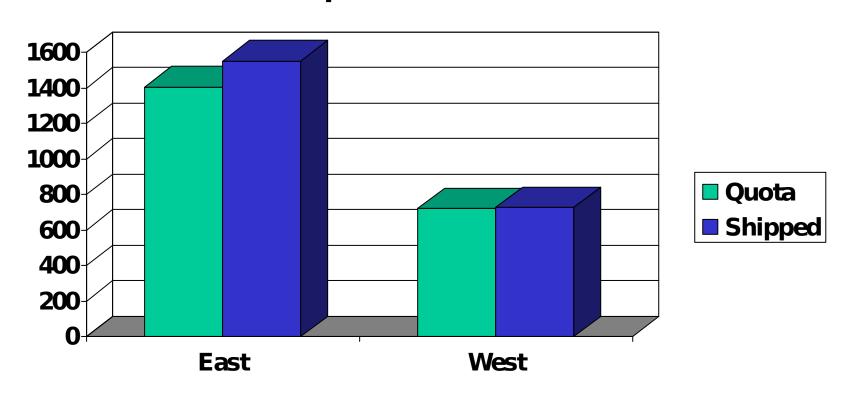


- Essential Readiness Mission
 - Wartime Requirements 550 units/day
 - Peacetime ASWBPL Contingency Requirement 288 units/month
 - New ASWBPL Contingency Quota 485 units/month
- AF Missions
 - Blood Donor Centers 8 licensed, 3 satellite collection sites
 - Armed Services Whole Blood Processing Laboratories
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ASWBPL Quota Compliance

USAF Compliance Since 22 Oct 01





- Future Challenges Before 11 Sep 01
 - American Red Cross deferral for variant CJD
 - 3 months in UK or 6 months in Europe since 1980
 - Requires supplying EUCOM from CONUS
 - Must make up 25% reduction in available donors
 - DoD needs to collect 100,000 units/year
 - Frozen Blood
 - Replace current inventory with new technology
 - Thawed/deglycerolized will be good for 14 days
 - Rethink distribution system
- Good Manufacturing and Quality Practices will drive our strategic decisions



11 Sep Timeline

On that morning:

- Chief, Air Force Blood Program in New York City, emergency leave
- Air Force Blood Quality Assurance Program Chief, recently assigned to Bolling AFB, DC at home receiving HHG
- Outgoing AF Blood QA Program Chief, recently assigned to DBSS Project Office at Skyline, Falls Church, VA



11 Sep Timeline

- When 2nd plane hit WTC, realization of an attack
- USAF/SG office evacuated and relocated
 - AF Blood Operations established at ASBPO
 - Blood inputs coordinated for the AF Crisis Action Team
 - Communications disrupted
 - Cell phones overloaded
 - Land lines down between DC and NYC
 - Transportation disrupted
 - All civil aircraft grounded
 - All bridges and tunnels into and out of NYC closed



11 Sep Timeline

- Air Force Blood Quality Assurance Program Chief arrives at ASBPO and is acting AF SBPO
- Wilford Hall, Keesler and Wright-Patterson able to continue operations because of local testing
 - Shipment of blood not possible at first
- Other donor centers do not have testing readily available
- Land telephone to NYC inoperable
 - Cell phone to AF Blood Program Chief works
 - Communications with NY Blood Center established by calling AF Blood Program Chief on cell phone and relaying message by land line within NYC
- Overwhelming donor turnout causes blood storage problems
 - NY Blood Center requests assistance from DoD for storage



CAP Missions for ONE 11-17 Sep 01

- #RI-18-01 was issued to Rhode Island CAP to support transport of blood by air.
- #ID-21-01 was issued to Idaho CAP to support Red Cross in flying blood samples to San Diego CA for testing prior to shipment to disaster area.
- #CA-22-01 was issued to California CAP to fly blood samples for Red Cross to lab in San Diego prior to shipment to disaster area.
- #OR-24-01, issued to Oregon CAP to fly blood from Boise to San Diego.
- #NM-25-01, issued to New Mexico CAP to fly blood from Albuquerque, NM to Phoenix, AZ.

- #OR-30-01, move test tubes from Portland to San Diego and blood from Portland, OR, to Los Angeles, CA.
- #WY-31-01, move blood from Cheyenne, WY, to Rapid City, SD.
- #UT-32-01, move blood from Salt Lake City, UT, to San Diego, CA.
- #RI-34-01, move blood from Providence to Morristown for transshipment to Tampa.
- #OR-35-01, move blood from Portland to Great Falls.



Other ONE Support Activities

- Oklahoma ANG flies 1600 units of blood to ASWBPL-East for transport to NYC
- NY Blood Center requests ASWBPL-East store excess units
- ARC requests ASWBPL-West store excess units
- Blood Centers nationally have excess blood on hand due to overwhelming donor response
 - Plan to employ new Haemonetics 215 enacted to attempt to salvage as many units as possible before expiration



- Future Challenges After 11 Sep 01
 - Medical Readiness, Good Manufacturing and Quality Practices will drive our strategic decisions
 - FDA deferral for variant CJD
 - 3 months in UK between 1980 & 1996
 - For DoD, 6 months in Europe between 1980 & 1996
 - 5 years in Europe since 1980
 - People affected between 1980 & 1996 will decrease
 - Frozen Blood
 - Replace current inventory with new technology
 - Thawed/deglycerolized will be good for 14 days
 - Rethink distribution system
 - Get it started now



Lab & Blood Program UTC's

- ASWBPL FFBAAa*
 - Four 6 person teams
- CONUS BDC FFBAAb*
 - Five 15 person teams
- OCONUS BDC FFBAAc*
 - Three 12 person teams
- Frozen Blood FFBD1
 - Seven 12 person teams
- TBTC FFBTP
 - Five 12 person teams
- OCONUS BDC (Aug) FFLGC
 - Three 9 person teams
- BTC FFLGD
 - Eighteen 6 person teams
 - One lab tech

- Biological Augmentation Team - FFBAT
 - 38 two person teams
- Lab Augmentation FFBU2
 - 19 one tech packages
- Lab Augmentation FFBU3
 - 8 one officer packages
- EMEDS +10 FFEP3
 - 40 two person teams
- EMEDS +25 FFEP4
 - 29 one tech teams
- Homeland Security proposed
 - 48 two person "BAT-like" teams



Lab & Blood Program UTC's

- Blood Program Manpower
 - 301 Lab Techs assigned to a blood UTC
 - 23 Lab Officers assigned to a blood UTC
- Other Laboratory Manpower
 - 174 Lab Techs assigned to a lab UTC
 - 134 Lab Officers assigned to a lab UTC
- Total Laboratory Manpower on a UTC
 - 475 Lab Techs assigned to a UTC
 - 157 Lab Officers assigned to a UTC



Business Case Analysis

- ASBPO has contracted for a BCA of the ASBP
- Preliminary report indicates that small AF BDC's have the highest cost per unit collected
- BCA does not evaluate the readiness benefit of these BDC's
 - Does state that there is a training value
- Must determine if small donor centers provide an adequate source of trained donor center technicians for augmenting other donor centers



Frozen Blood Project

- New cell washers allow post-thaw storage of frozen red cells up to 14 days
- True walk-away capability
- Allows better utilization of units
- Fewer technicians required to operate
- Can now store units frozen and ship thawed/washed
- ASWBPL can be central freezing/thawing
- Remote OCONUS sites can use product everyday
- Project initiated 17 Sep 01



Lessons of 11 Sep

- Contingency plans are good to have
 - Without air transportation, need alternate testing sites
 - Needed creativity to deal with communication outage
- Training in contingency operations is good to do
 - Everyone knew what needed to be done and did it
 - Invaluable when key personnel are unavailable
- Flexibility, ingenuity, creativity essential

